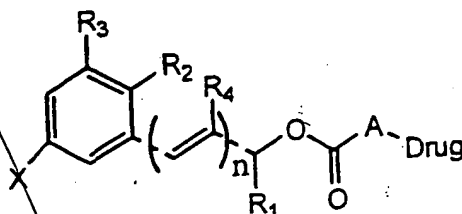


--37. A prodrug comprising a drug moiety bound to a carrier framework having the formula (Z):



wherein:

X=H, OH, OMe or N(CH₃)₂; and

n=0-6;

and;

R₁=H, C₁₋₄ lower alkyl, or together with R₂ forms part of a cycloalkyl group which may be further substituted to form part of a polycyclic cycloalkyl group, or with R₂ forms part of a steroidal carbon framework;

R₂=H, OMe, C₁₋₄ lower alkyl, or together with R₁ and/or R₃ forms part of a cycloalkyl, polycyclic cycloalkyl or steroidal carbon framework, or forms part of a polycyclic aromatic group by linkage to R₄;

R₃=H, OMe, C₁₋₄ lower alkyl or together with R₂ forms part of a cycloalkyl, polycyclic cycloalkyl or steroidal carbon framework; and

R₄=H or is fused directly to the aromatic position designated by R₂ and either:

the drug moiety is derived from a drug having a free amino, hydroxyl or thiol group and which links it to the rest of the prodrug, such that A represents NH, NR (R=C₁₋₄ lower alkyl), O or S; or

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the drug moiety is derived from a drug having a carboxylate group, an ester linkage joining it to the rest of the prodrug and A being absent.

38. A prodrug according to claim 37, wherein aromatic hydroxylation of the prodrug causes release of the drug moiety.

39. A prodrug according to any one of claim 37 or claim 38, wherein enzymatic aromatic hydroxylation of the prodrug causes release of the drug moiety.

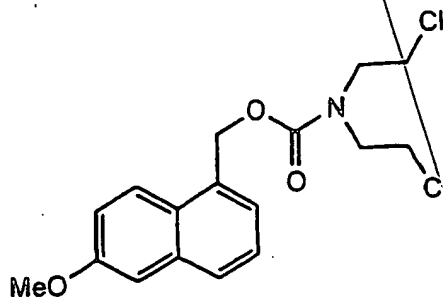
40. A prodrug according to any one of claim 37 or claim 38, wherein hydroxylation of the prodrug by CYP1B1 causes release of the drug moiety.

41. A prodrug according to claim 39, wherein hydroxylation of the prodrug by CYP1B1 causes release of the drug moiety.

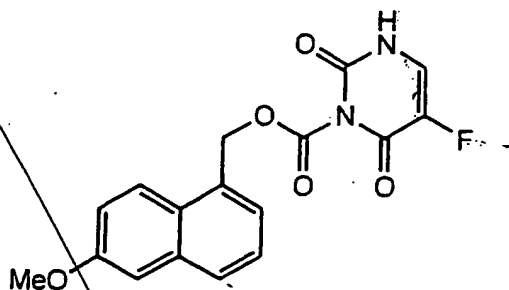
42. A prodrug according to claim 37 wherein the framework includes at least one selected from the group consisting of a naphthyl group and a phenanthryl group.

43. A prodrug according to claim 37, having a formula selected from the group consisting of:

(XV):

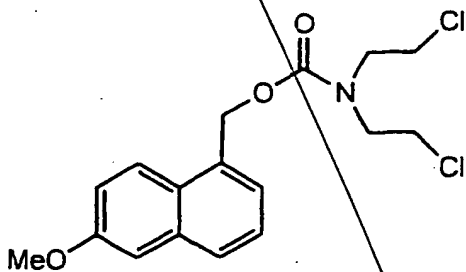


(XVI):



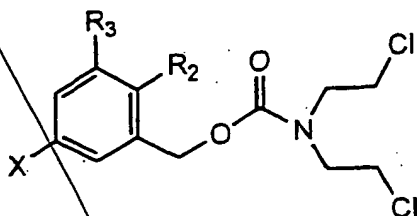
and

(XVII):



44. A prodrug according to any one of claim 37 or claim 38, having a substituted benzyl carrier framework.

45. A prodrug according to claim 44, having the general formula (Y):

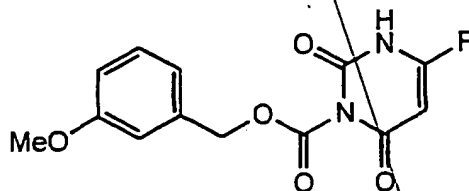


R₂, R₃ and X being selected from any one of the group of:

- a) R₂ = H, R₃ = H, X = OMe in Formula XVIII;
- b) R₂ = H, R₃ = OMe, X = OMe in Formula XIX;
- c) R₂ = H, R₃ = H, X = H in Formula XX;
- d) R₂ = OMe, R₃ = H, X = H in Formula XXI; and
- e) R₂ = OMe, R₃ = H, X = OMe in Formula XXII.

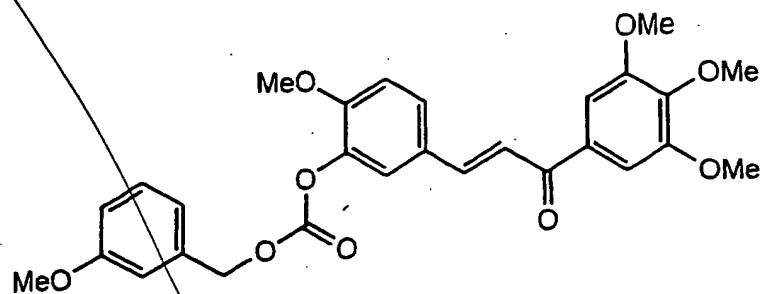
46. A prodrug according to claim 44, having a formula selected from the group consisting of:

(XXIII):

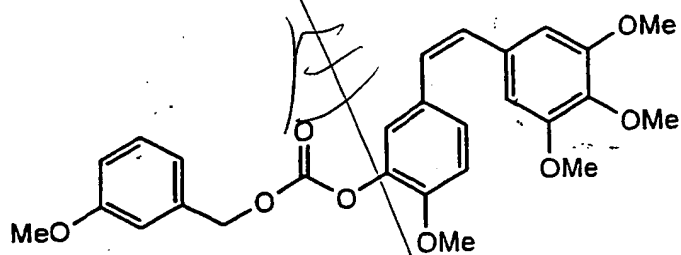


contd.
C1

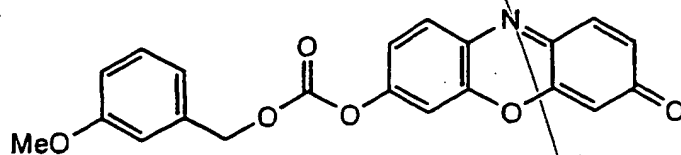
(XXV):



(XXVI):

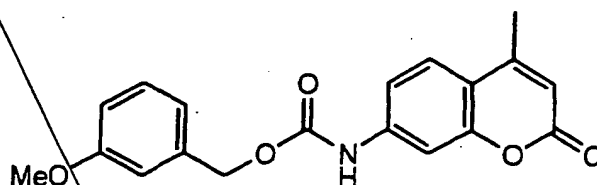


(XXVII):



contd.
P1
and

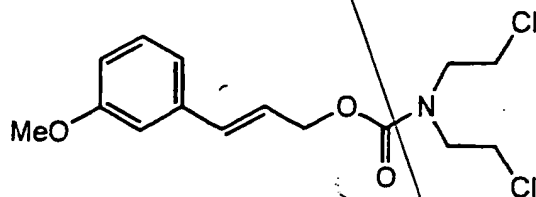
(XXVIII):



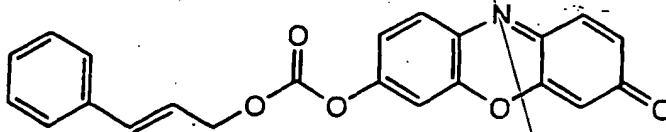
47. A prodrug according to any one of claim 37 or claim 38, having a cinnamyl carrier framework.

48. A prodrug according to claim 47, having a formula selected from the group consisting of:

(XXX):

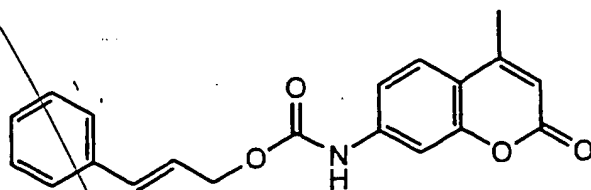


(XXXI):



contd.
Q1
and

(XXXII):



49. A prodrug according to claim 38, wherein aromatic hydroxylation causes the release of the drug moiety and carbon dioxide.

50. A composition comprising a prodrug according to any one of claim 37 or claim 38 and a carrier.

51. A method of manufacture of a medicament for the treatment of a tumor, comprising providing a prodrug according to any one of claim 37 and claim 38 and combining the prodrug with a carrier.

52. A method of inhibiting tumor cell growth comprising:
contacting a tumor cell with a prodrug according to any one of claims 37 or 38.

- concluded*
C1
53. A method of detection of aromatic oxidation activity of a sample comprising of:
- i) contacting a sample with a prodrug according to any one of claim 37 or claim 38;
 - ii) detecting any product of aromatic oxidation of the prodrug; and
 - iii) correlating detection of the product of aromatic oxidation of the prodrug with aromatic oxidation activity of the sample.
54. A method according to claim 53, wherein the aromatic oxidation activity is enzymatic.
55. A method according to claim 54, wherein the aromatic oxidation activity is CYP1B1 aromatic oxidation activity.
56. A method of detecting the presence of tumor cells in a sample comprising:
- contacting the sample with a prodrug according to any one of claim 37 or claim 38,
 - detecting any product of aromatic oxidation of the prodrug, and
 - correlating detection of the presence of the product with the presence of tumor cells in the sample.--
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